FIGS. 6, 8, and 10, have been amended to specifically label the nasopharynx (32a), oropharynx (32b), and laryngopharynx (32c) portions of a human respiratory system.

FIGS. 7-11 have been amended to add element number 22 (arm).

FIG. 9 has also been amended to add element numbers 208 (angle) and 307 (locking structure).

FIG. 10 has also been amended to add element number 307 (locking structure).

FIG. 11A has also been amended to now show the transmitter 220 in the electronics 116 portion.

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In the Specification

Please replace the following identified paragraphs. A redlined version of these replacement paragraphs is provided in "Attachment A."

Please replace the paragraph beginning on page 4, line 8 with the following paragraph:

In accordance with one aspect of this invention, the instrument provides a blade or arm having an elongate base portion and an elongate lifter portion having a distal end thereof extending therefrom, preferably at an angle between 15° to 85°, inclusive. The lifter is sized and shaped to engage, lift and support the patient's epiglottis, thereby to expose the glottis. In a preferred embodiment, the base portion and lifter portion are substantially the same length, and a viewing device, which is preferably a Charged Coupled Device ("CCD") or Complementary Metal Oxide Semiconductor ("CMOS") camera positioned near the transition portion between the base and lifter portions, is aligned to provide a perspective view toward the distal end of the lifter. Lights, which are preferably Light Emitting Diode ("LED") units, are positioned toward the distal end of the lifter to facilitate viewing. A transparent protective sheathing may be positioned over the assembly to facilitate cleaning and provide sterile multiple use of the device.

Please replace the next two paragraphs beginning on page 7, line 20 with the following paragraphs:

As noted, the instrument is inserted, distal end 26 first, through the patient's mouth 30. As explained below, when properly inserted, the distal end of the endotracheal tube 40 resides in the pharynx 32. Recently, individual portions of the pharynx 32 have become more commonly referred by those skilled in the art as the nasopharynx 32a (FIG. 6), the oropharynx 32b (FIG. 6), and the laryngopharynx 32c (FIG. 6). Accordingly, using these commonly known and more precise terms of the human respiratory system, the endotracheal tube 40 resides in the laryngopharynx 32c (FIG. 6). The patient's epiglottis 34 is supported by the instrument in a manner to expose the glottis 36. In the present invention, the instrument provides for the telescopically observed advance of the leading end 38 of an endotracheal tube 40 through the glottis 36, into the larynx 42 adjacent to the vocal cords 44. As is known in the art, an endotracheal tube 40 permits air to be conducted to and from an incapacitated patient. The present instrument includes a number of features that greatly increase the ease with which the instrument and tube 40 can be properly located and continuously observed via a telescope or other optic device.

More particularly, the arm 22 of the instrument is configured to define in the handle 24 and on its anterior surface 46 a guide path for the smooth advance of the tube 40 relative to the inserted instrument. For the purpose of this description, the anterior surface 46 of the instrument is, as shown in Fig. 6, that facing the lower jaw 48 of the intubated patient.

Please replace the paragraph beginning on page 9, line 6 with the following paragraph:

The side edges 54 terminate in a loop 60 that is part of the instrument and protrudes from the distal end 26 of the instrument at an angle 55 (FIG. 1) of about 45 degrees relative to the length of the arm 22. As viewed from the end (Figs. 2 and 5), the loop defines an elongated opening 64 through which extends the leading end 38 of the tube 40.

Please replace the paragraph beginning on page 10, line 16 with the following paragraph:

Once the arm 22 is in place, the guard 70 serves to prevent the tissue in the pharynx 32 from contacting the distal end 26 of the arm 22 and obstructing the view available to a viewer that is carried by the instrument. In this embodiment a telescope 80 is shown. In this regard, the

telescope 80 is one that terminates in a long tubular member having an objective lens at its end 82. The terminus of the telescope fits into a telescope passage 83 that is formed through the arm 22. The telescope also includes a light post 86 that is mounted to the telescope 80 near the outer end 88 of the passage 83 and that provides illumination to the telescope 80. In a preferred embodiment of the instrument, a suitable telescope is one having approximately a 25-degree viewing angle; such as manufactured by Henke-Sass, Wolf of America Inc., Southbridge, Massachusetts, as model number 8853.42.

Please replace the next two paragraphs beginning on page 15, line 16 with the following paragraphs:

Preferably, the lifter portion 204 is at least approximately 3 centimeters long, and the angle 208 between the base portion 202 and lifter portion 204 is between 5° and 90°, inclusive. More preferably, the length 205 of the lifter portion 204 is between approximately 4 centimeters and 8 centimeters long, and the angle 208 between the lifter portion 204 and base portion 202 is between 30° and 60°. Even more preferably, the length 205 of the lifter portion 204 is approximately the same as the length 207 of the base portion 202, both of which are approximately 6 centimeters long, and the angle 208 between the lifter and base portions is approximately 45°. Obviously, the overall geometry between the base portion 202 and lifter portion 204 is important for effective operation of the instrument. Proportionately smaller sizes should be used for pediatric applications.

A viewing device, which is preferably a camera 80' operably secured to the instrument, is preferably positioned along the posterior surface of the lifter portion 204, near the transition portion between the base and lifter portions 202, 204, respectively, and aligned to provide a perspective view toward the distal end 210 of the lifter portion 204. More preferably, the camera 80' is mounted to the left side of the instrument when viewed from the handle 25, thereby permitting passage directly down the midline of the patient's tongue. The lifter portion 204 protects the camera from being blocked by tissue and debris. Moreover, positioning the camera 80' away from the distal end 210 of the lifter portion 204 provides the user with a clear perspective view of the entire area.

Please replace the paragraph beginning on page 16, line 22 with the following paragraph:

The camera 80' is preferably a Complementary Metal Oxide Semiconductor ("CMOS") or Charged Coupled Device ("CCD") hybrid camera, both of which are more compact, light weight, light sensitive, and economical, than traditional cameras used in such applications. Known manufacturers and sellers of such cameras include Sun Microsystems, Amain Electronics, and Misumi Electronics. Preferably, the camera 80' is operably connected to a power source 214, such as a battery or A/C connection, and suitable related electronics 216 , which are stored in the handle 24 of the instrument. As best shown in Figs. 11A&B, the camera 80' is operably connected to a display 218, either by a direct (Fig. 11B) or remote (Fig. 11A) connection. Such remote connections can include a transmitter 220 received within the instrument and the display 218 including a receiver 222 for receiving video signals from the transmitter 220. Alternatively, such a system can include infrared technology or the like. The camera 80' and related transmitter 220 can also communicate with a display, or other equipment such as remote locations via the evolving industry standard more commonly known as "bluetooth." Such communication can also be used to transmit the information via the Internet or the like, thereby facilitating real-time remote incident analysis, advice, assistance, and/or teaching.

Please replace the paragraph beginning on page 19, line 6 with the following paragraph:

In particular, a locking mechanism 307, such as an actuation lever 300 having a handle 302 at one end extends through a channel 304 in the base portion 202 to pivot the lifter portion 204 about pivot point 301. Detents 306 between the actuation lever and base portion allow a user to select the desired angle 208 between the lifter portion 204 and base portion 202, and lock that position in place. Accordingly, by manipulating the actuation lever, the optimal angle 208 between the lifter portion 204 and base portion 202 for a particular patient may be selected on site by the practitioner.

In the Claims

Please cancel claims and without prejudice. Claims 1, 2, 4-14, 19, and 21-30 have been rewritten herein. New claims 31-44 have been added. A redlined version of the amended claims is attached as "Attachment B" to this amendment.